

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/603,418	06/24/2003	Sunichi Sato	2271/53467-A1	9699	
23432	7590 03/23/2005		EXAMINER		
COOPER & DUNHAM, LLP 1185 AVENUE OF THE AMERICAS			SCHILLINGER, LAURA M		
NEW YORK, NY 10036			ART UNIT	PAPER NUMBER	
			2813		
			DATE MAILED: 03/23/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

			A	1		
		Application No.	Applicant(s)	<b>#</b> 5		
		10/603,418	SATO, SUNICHI			
	Office Action Summary	Examiner	Art Unit			
		Laura M. Schillinger	2813			
Period fo	The MAILING DATE of this communication apport Reply	pears on the cover sheet with t	he correspondence address			
THE - Exte after - If the - If NC - Failt Any	MAILING DATE OF THIS COMMUNICATION.  MAILING DATE OF THIS COMMUNICATION.  IN SIX (6) MONTHS from the mailing date of this communication.  Period for reply specified above is less than thirty (30) days, a reply or period for reply is specified above, the maximum statutory period or reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply y within the statutory minimum of thirty (30 will apply and will expire SIX (6) MONTHS a cause the application to become ABANE	be timely filed  )) days will be considered timely.  from the mailing date of this communication.  DONED (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on 07 Ja	anuary 2005.				
2a)[]	This action is <b>FINAL</b> . 2b)⊠ This	s action is non-final.				
3) 🗌	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 1	1, 453 O.G. 213.			
Disposit	ion of Claims					
4) 🖂	Claim(s) 22-59 is/are pending in the applicatio	n.				
	4a) Of the above claim(s) 23-37 and 39-59 is/a	re withdrawn from considerat	ion.			
5)	Claim(s) is/are allowed.					
6)⊠	Claim(s) 22 is/are rejected.					
7)🛛	Claim(s) 38 is/are objected to.					
8) 🗌	Claim(s) are subject to restriction and/o	r election requirement.				
Applicat	ion Papers					
9)[	The specification is objected to by the Examine	er.				
10)	The drawing(s) filed on is/are: a) acc	epted or b) objected to by	the Examiner.			
	Applicant may not request that any objection to the	drawing(s) be held in abeyance.	See 37 CFR 1.85(a).			
	Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) i	s objected to. See 37 CFR 1.121(d).			
11)	The oath or declaration is objected to by the Ex	kaminer. Note the attached O	ffice Action or form PTO-152.			
Priority (	under 35 U.S.C. § 119					
a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority document  2. Certified copies of the priority document  3. Copies of the certified copies of the priority document  application from the International Burea	s have been received. s have been received in Appl rity documents have been rec u (PCT Rule 17.2(a)).	ication No ceived in this National Stage			
Attachmen 1) ⊠ Notic 2) □ Notic	See the attached detailed Office action for a list  at(s)  be of References Cited (PTO-892)  be of Draftsperson's Patent Drawing Review (PTO-948)  mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	4) ☐ Interview Sum Paper No(s)/M	mary (PTO-413) ail Date mal Patent Application (PTO-152)			
	er No(s)/Mail Date	6) Other:	•			

Art Unit: 2813

### **DETAILED ACTION**

## Claim Objections

Claim 38 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Election/Restrictions

Applicant's election with traverse of claims 22 and 38 in the reply filed on 6/24/03 is acknowledged. The traversal is on the ground(s) that the search for separate species would not be burdensome and that the species are not distinct. This is not found persuasive because the species are distinct in that separate independent features are claimed which must each be separately searched for thus creating a burdensome search.

The requirement is still deemed proper and is therefore made FINAL. Claims 23-37, 39-59 are withdrawn as pertaining to non-elected claims.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 22 is rejected under 35 U.S.C. 102(b) as being anticipated by Ohkouchi et al (Proceedings of 12<sup>th</sup> Symposium on Alloy Semiconductor Physics and Electronics, 1993, pages 337-340: Applicant's Admitted Prior Art described on Col.2, lines: 3-10 in US 5904549).

In reference to claim 22, Ohkouchi (Applicant's Admitted Prior Art) teaches a method comprising:

Forming an alloy semiconductor by an MOCVD method at a pressure of at least that of convention low pressure MOCVD (Col.2, lines: 5-10), using a nitrogen containing organic compound as a source material for nitrogen, wherein the nitrogen containing organic compound is selected from the group consisting of monomehthylhydrazine, dimethylhydrazine and tertiary butylamine (Col.2, lines: 5-10 (DMHy), and using a source material for As, wherein the III-V alloy semiconductor comprises at least Ga, In, N and As (Col.2, lines: 5-10).

## Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter:

Claim 38 contains allowable subject matter, prior art of record fails to teach the limitations of

claim 22 further comprising the use of a horizontal type MOCVD apparatus to carry out the

MOCVD method. However, Applicant is requested to provide a copy of the Admitted Prior Art

for review in prosecution to determine if the allowable subject matter is contain within.

## Conclusion

Art Unit: 2813

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LMS

03/15/05